

REMARKS

I. Status of Claims

Claims 1-5 and 9-26 are pending in the application. Claims 1 and 14 are amended to recite that the dispersion stabilizers comprise a chelate, an organic acid and a phosphate ester-based compound, and the content of the dispersion stabilizer is from 0.02 to 20% by weight. Support for the amendments can be found, for example, at page 28, lines 23-25, the working Examples of the present specification and the original claims. Claim 9 is amended to delete the limitation of the amount of dispersion stabilizer used, without prejudice or disclaimer, in view of the amendment to claim 1.

No new matter is added. Accordingly, entry of the Amendment is respectfully requested.

II. Response to Claim Rejection Under 35 U.S.C. § 103

Claims 1-5 and 9-26 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kondo (U.S. Patent No. 6,329,061) in view of Kobata et al. (U. S. Patent No. 6,673,456 B1).

Applicants respectfully traverse, at least for the following reasons.

Present claim 1 recites a dispersion of tin-doped indium oxide fine particles, having the following features:

- (1) the dispersion stabilizers comprise a chelate, an organic acid, and a phosphate ester-based compound;
- (2) an organic solvent containing at least one alcohol as a main component is included; and,
- (3) the content of the dispersion stabilizer is from 0.02 to 20% by weight.

Applicants submit that the cited references, whether taken alone, or in combination, do not teach or suggest the combination of features (1) to (3) and do not teach or suggest the advantageous effects of the combination of these features.

The effects obtained by the combination of the features (1) to (3) are shown in the attached Rule 132 Declaration by Masahiro Hagiwara. Specifically, by combination of the features (1) to (3) of the present invention, unexpectedly superior effects can be achieved with respect to the high visible light transmittance, haze values, the reflection of yellow index and the reflection measured value. Further, in consideration of the acid-base status in the surface of the tin-doped indium oxide fine particles, it is most preferable that the dispersion stabilizers include a phosphate ester-based compound.

By including both of the dispersion stabilizers containing chelate, organic acid, and phosphate ester-based compound at the content of 0.02 to 20% by weight, and the organic solvent containing at least one alcohol as a main component (the combination of the features (1) to (3)), the acid-base status and the balance of the hydrophilicity-hydrophobicity become optimum in the dispersion of tin-doped indium oxide fine particles. Therefore, as shown in the attached Declaration of Mr. Hagiwara, significant excellent values can be obtained in all of the visible light transmittance (Tv), the solar radiation transmittance (Ts), the haze value, the reflection yellow index (reflection YI), and the Reflection measured value. In particular, as shown in Example 1 and Comparative Examples 3 and 4 in the attached Declaration of Mr. Hagiwara, in the case in which the content of the dispersion stabilizer is limited to be in the range from 0.02 to 20% by weight, more excellent values can be obtained in all of the visible light transmittance (Tv), the solar radiation transmittance (Ts), the haze value, the reflection yellow index (reflection YI), and the Reflection measured value.

In contrast, the combination of the features (1) to (3) is not disclosed in Kondo and Kobata. In particular, in Kondo and Kobata, there is no description or suggestion regarding feature (3) of the present invention, i.e., the content of the dispersion stabilizer in the range 0.02 to 20% by weight, and it's corresponding effects. Accordingly, even when the dispersion of ITO fine particles of Kobata includes alcohols, the effects of the present invention cannot be obtained, that is, excellent values cannot be obtained for the visible light transmittance (T_v), the solar radiation transmittance (T_s), the haze value, the reflection yellow index (reflection YI), and the Reflection measured value.

Furthermore, in column 10, lines 38-39 of Kobata, it is described that compound having one or more carboxyl groups at its terminal position can be used not only in dispersing the particles but can also be added after dispersing the particles by the use of other dispersants, and in either case, the dispersion stability can be obtained at high temperatures. Therefore, since the present invention is different from Kobata in its effects, the present invention is not obvious based on Kobata and the use of alcohols disclosed in Kondo.

In view of the above, the dispersion of ITO fine particles of claim 1 is patentable over Kondo and Kobata.

Claims 2-5 and 9-26 depend directly or indirectly from claim 1 and are patentable over the combination of Kondo and Kobata, at least by virtue of their dependence from claim 1. Furthermore, with respect to the method claims 14-17, Kondo and Kobata do not disclose, teach or suggest the combination of features (1) to (3) as stated above. Additionally, the significant effects obtained by the combination of features (1) to (3) cannot be obtained by Kondo and Kobata. Therefore, the methods of manufacturing the dispersion tin-doped indium

oxide fine particles of claims 14-17 are patentable over Kondo and Kobata for this additional reason.

Accordingly, reconsideration and withdrawal of the § 103 rejection of claims 1-5 and 9-26 based on Kondo in view of Kobata is respectfully requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,


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